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(19) **United States**(12) **Patent Application Publication****McPherson et al.**(10) **Pub. No.: US 2015/0058999 A1**(43) **Pub. Date: Feb. 26, 2015**(54) **PROVIDING PRIVACY ENHANCED  
RESOLUTION SYSTEM IN THE DOMAIN  
NAME SYSTEM**(52) **U.S. Cl.**CPC ..... *G06F 21/60* (2013.01); *G06F 17/30864*  
(2013.01); *H04L 61/1511* (2013.01)USPC ..... **726/26**(71) Applicant: **VERISIGN, INC.**, Reston, VA (US)(72) Inventors: **Danny McPherson**, Leesburg, VA (US);  
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(57)

**ABSTRACT**(21) Appl. No.: **14/531,424**(22) Filed: **Nov. 3, 2014****Related U.S. Application Data**(63) Continuation-in-part of application No. 13/340,895,  
filed on Dec. 30, 2011, now Pat. No. 8,880,686.**Publication Classification**(51) **Int. Cl.***G06F 21/60* (2006.01)*H04L 29/12* (2006.01)*G06F 17/30* (2006.01)

An apparatus and a non-transitory computer-readable medium may perform a method of minimizing the disclosure of a domain name contained in a DNS query. The method may include determining a first label and a second label associated with a domain name included in a DNS query. A first nameserver may be queried for a first resource record type associated with the first label without revealing information related to the second label by removing information related to the second label from the DNS query. A response may be received from the first nameserver, and the response may include the first resource record type which directs a resolver to a second nameserver. The second nameserver may be queried for a second resource record type associated with the first label and the second label.

